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Request for grant of a patent

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> Joseph GAbriel Maginness 28 Shaneen Park Belast BT14 8JP, Northern Ireland, U.K.

Patents ADP number (if you know to)

If the applicant is a corporate body, give the country/state of its incorporation

8400 418 001

4. Title of the invention

CONTAINER FOR COLLECTING AND DISPOSING OF ANIMAL EXCRETA

5. Name of your agent (from bove one)

"Address for service" in the United Kingdom to which all correspondence should be sent. (including the postcode) ANSONS

240 Upper Newtownards Road Belfast BT4 3EU Northern Ireland United Kingdom

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Description

Claim(4)

Abstract

Drawing®

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Statement of inventorship and right to grant of a patent (Patents Form 7/77)

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11.

I/We request the grant of a patent on the basis of this application.

ignature John P Hanna

Date10-02

 Name and daytime telephone number of person to contact in the United Kingdom

John P Hanna - 02890 656103

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SHELL FOR COLLECTING AND DISPOSING OF ANIMAL EXCRETA

The present invention relates to a shell for collecting and disposing of animal excreta and in particular to a hand held shell for collecting dog's excreta.

Reference is made to earlier GB patent application number GB 0123539.0 the contents of which are incorporated herein by reference thereto. The present invention discloses an improved embodiment of shell as disclosed in GB 0123539.0.

Accordingly, there is provided a hand-held portable shell for collecting and disposing of animal excreta comprising a shell having an opening for receiving excreta, the shell having an impaling means including a plurality of tines disposed within the shell for impaling excreta.

Preferably, the tines are provided by teeth tapered so that the edges of the teeth closest to the opening of the shell are thin enough to allow at least partial penetration of excreta received into the opening.

Ideally, the teeth extend radially inwardly from the shell.

Preferably, the teeth are symmetrically disposed about the central axis of the shell.

Ideally, the shells are nestable with one another. This reduces the space required for shells during storage transportation and use,

Preferably, one or more shells are releasably mountable on a first end of a housing, the housing comprising a hollow elongate element for receiving an aerosal cartridge.

Ideally, the or each shell is held on the end of the housing by a collet. Alternatively, the shells are held in place by friction.

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Preferably, the shell has a flared open end. This allows the shell to receive excreta of varying size and forms.

Ideally, the aerosol includes a freezing component.

Preferably, the housing comprises two identical semi-cylindrical plastics mouldings.

5 This reduces the manufacturing costs of the housing.

Preferably, a second end of the housing accommodates means for actuating an aerosol cartridge so that a predetermined portion of serosol is dispensed.

Ideally, the actuating means comprises a button housed in the second end and being depressible so as to dispense aerosol from the aerosol cartridge.

Preferably, the button has a predetermined travel so that a desired quantity of aerosol is dispensed when the button is depressed along the full distance of its travel.

Ideally, the second end of the housing defines a slot and the button defines a flange housed within the slot so that the travel of the button is delimited by the width of the slot.

Preferably, the button is normally urged out of the housing by the blasing means on the nozzle of the cartridge.

Ideally, the travel of the button is selected to accommodate a wide range of serosol cartridges.

Preferably, the surface of the button in contact with the aerosol cartridge is substantially hemispherical.

Preferably, an outer surface of the housing for receiving a hand is adapted to increase friction between the users hand and the housing.

Ideally, a rib and grove formation is provided on at least a portion of the outer surface of the housing.

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Preferably, means for engaging the nozzle of the aerosol cartridge are provided on the first end of the housing so that a predetermined optimum quantity of aerosol is dispensed when the button is fully depressed once.

Ideally, a seat is provided for supporting the dispensing end of the cartridge.

Preferably, the engagement means depresses the nozzle of the serosol cartridge in response to the button being depressed so that aerosol is dispensed.

Idealiy, a plurality of shells are releasably mounted on the first end of the housing.

Preferably, the shells have an aperture for receiving the aerosol from the cartridge.

Ideally, the aperture is disposed centrally of the shell and is substantially aligned with the dispensing nozzle in use.

Preferably, an upstanding collar is disposed on the outside of the shell surrounding the aperture.

Ideally, the collar is suitably dimensioned for engaging the nozzle of the aerosol cartridge in order to dispense aerosol in response to the button being depressed.

Accordingly, the present invention also provides a method of collecting animal excreta comprising the steps of contacting the excreta with a solid body, dispensing aerosol including a freezing component around the excreta and solid body so as to form a bond between the excreta and the solid body and subsequently lifting the solid body so as to remove the excreta from the surface it was desposited on.

This invention will now be described with reference to the accompanying drawings, which show by way of example only, one embodiment of shell in accordance with the invention. In the drawings:-

Fig. 1 is an internal perspective view of a shell;

Flg. 2 is an external perspective view of the shell of Flg. 1; and

25 Fig. 3 is a partial cutaway perspective view of the shell.

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Referring to the drawings, and initially to fig. 1, there is shown a shell of a shell indicated generally by the reference numeral 1. The shell 1 has a circular base 2 and a wall 3 upstanding from the base 2. The base 2 has a central aperture 4. Ten tapered teeth 5 are integrally formed with the base 2 and upstanding wall 3. The edges 6 of the teeth 5 closest to the opening of the shell 1 are thin enough to allow penetration of excrete received into the opening. The teeth 5 extend radially inwardly from the base 2 and wall 3 and cover a substantial portion of the space enclosed by the shell 1.

Referring now to Fig. 2, cavities 8 are defined on the external surface 9 of the shell 1 by the radially inwardly extending teeth 5 of Fig. 1. An integrally formed collar 10 upstanding from the base 2 in a direction opposite to the wall 3 encloses the aperture 4. The end of the wall 3 distal from the base 2 defines a minor support rim or flange 11 on the external surface of the wall 3. (See Figs 1 and 2).

Referring to Fig. 3, there is shown the shell 1 of Figs.1 and 2 mounted on a housing 31. The housing 31 is a hollow elongate element 32.

The element 32 has two identical semi-cylindrical sections 33 (only one shown) fastened together by any suitable fasteners along the split line of the element 32 via bores 34 correspondingly located in each semi-cylindrical section 33. An aerosol cartridge 36 is accommodated within the housing 31 with the end of the cartridge 36 carrying a dispensing nozzle (not shown) juxtaposed the shell 1. A seat 37 is provided on the first end of the housing 31 juxtaposed the shell 1. The seat 37 provided on this end of the housing 31 is for supporting the tapered neck 38 of the cartridge 36. This end also has an abutment element (not shown) for engaging the nozzle (not shown) of the cartridge 36. A collet 41 also extends from this end of the housing 31 for releasably fastening the shell 1 thereon.

The second end of the housing 31 has a slot 42 perpendicular to the longitudinal axis of the housing 31. A cylindrical button 50 is held in this end of the housing 31 by a peripheral flange 51 which is housed within the slot 42 and movable relative to the slot 42.

The cartridge 36 urges the button 50 out of the housing 31 under normal circumstances due to the biasing force of the biasing element acting on the nozzle of the cartridge 36.

A rib and groove formation 53 is provided on the outer surface of the housing 31.

In use, an operator locates one or more shells 1 onto the first end of the housing 31.

In order to collect and dispose of excreta, the operator lowers the housing 31 and shell 1 towards the excreta with the open end of the shell 1 facing the excreta. The edges 6 of the teeth 5 are forced down into the excreta. At this point, the operator presses the button 50 forcing the nozzle of the cartridge 36 to engage the abutment element. This releases a predetermined amount of aerosol through the upstanding collar 10 and aperture 4 into the space in the shell 1 around the impaled excreta. A short period of time is allowed for the frozen excreta to bond with the teeth 5. The operator raises the housing 31 and shell 1 lifting the excreta off the surface it was deposited on. The operator can place a lid on the shell 1 and remove the sealed shell 1 from the housing 31 in order to discard the shell 1 and excreta.

Variations and modifications can be made without departing from the scope of the invention described above.

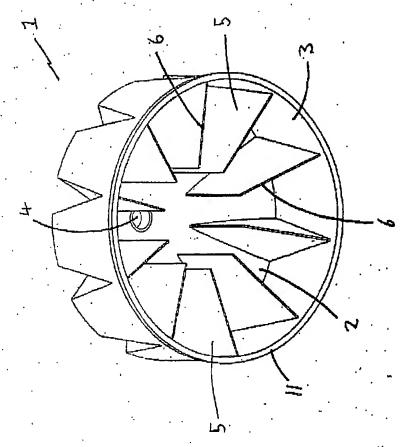
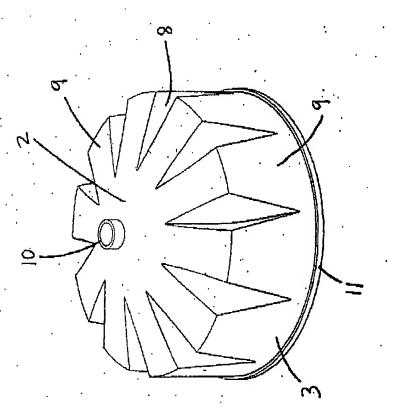
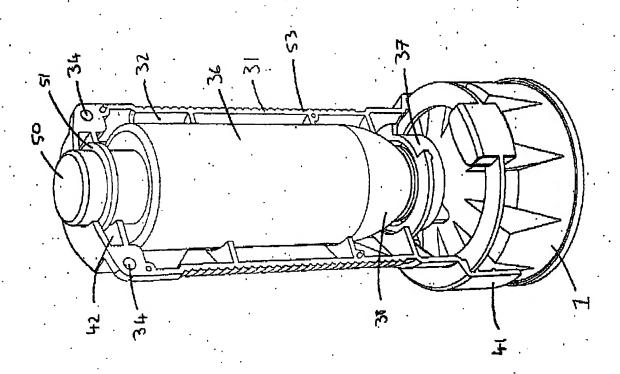


Figure 7



rigure 2



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